Geometry Honors

Properties of Midsegments

**Triangles:**

Draw a triangle and measure the length of each side.

Construct the three midsegments of the triangle. How do the lengths of the midsegments compare to the length of the sides of the triangle?

Under the Measure menu, calculate the slope of each side and midsegment. What conclusion can you make based on the slopes?

Calculate the area of each of the four triangles in the original triangle. What can be said about their areas?

**Trapezoids:**

Draw a trapezoid and its midsegment. Calculate the lengths of the bases and of the midsegment. What can be said about the length of the midsegment in comparison to the lengths of the bases?

Calculate the slopes of the bases and of the midsegment. What conclusion can you make based on the slopes? Find the measures of some angles to verify you conjecture.